

## REMARKS

Applicants acknowledge receipt of the Office Action dated April 2, 2007.

### Status of Claims.

Claim 10 is currently amended;

Claims 1–9 and 18–19 are canceled;

Claims 10–13, 15–17, and 20–23 are pending in the application.

### Claim Amendment.

Claim 10 is currently amended to require that the at least one insulator sequence comprises stretches of identical nucleotides flanked by identical restriction sites. This amendment is responsive to the Examiner's statements (at page 3, lines 1–2, and page 6, lines 3–8, of the Office Action mailed April 2, 2007) that the features upon which Applicant relies are not recited in the rejected claim(s).

Support for this amendment is found at page 15, lines 22–30 and page of the specification (which correspond to paragraphs [0102] and [0108] of the corresponding U.S. Patent Application Publication No. 2006/0105341). Those passages read as follows:

Insulator elements may be placed on either side of the RNA tags and function to ensure proper folding of the RNA tags and to discourage interactions between the tags and the target RNA sequence. Examples of suitable insulator elements include, but are not limited to stretches of 4–5 identical nucleotides (eg, adenosines) coupled with paired restriction sites that do not interact with the tag or bait sequences. The 5' and 3' restriction sites should be identical as these sequences can then hybridize, forming a stem that forces the "insulator" polynucleotide sequences to be "unpaired" thus isolating the internal tag or bait structures from the remainder of the RNA sequences produced from a specific vector. Insulator elements may also be called spacers.

and

Next the ability of the Streptavidin and MS2 coat protein tags to function together and in the presence of an RNA target molecule was tested. Cassettes containing a T7 promoter, the two RNA tags, alternative target RNA insertion sites and a poly A tail were made (Figure 1B). Insulator elements, consisting of 8–10 Adenosines flanked by identical restriction sites, were placed on either side of each tag to ensure proper folding of the tags and to discourage interactions between the tags and the inserted target RNA. <sup>32</sup>P-labeled RNAs were first tested for retention and elution on streptavidin and GST-coat protein columns. Both tags worked with much the same efficiency as when used individually. A construct containing 2XS1 tag SEQ ID NO: 17 and 2XMS2 tags SEQ ID NO: 18 are preferred.

[emphasis added]

**Claim Rejections under 35 U.S.C. § 102(a)**

Claims 10, 12, 15–17 and 20–22 remain rejected under 35 U.S.C. § 102(b) as being anticipated by *Srisawat et al.* As noted above, Applicants have amended claim 10 to require that the at least one insulator sequence comprises stretches of identical nucleotides flanked by identical restriction sites. Clearly *Srisawa et al.* do teach or disclose this feature. Applicants, therefore, respectfully submit that independent claim 10 and claims 12, 15–17 and 20–22 which depend therefrom, distinguish over *Srisawa et al.*

**Claim Rejections under 35 U.S.C. § 103(a)**

*Srisawat et al. and Rigaut et al.*

Claims 10–12, 15–17 and 20–22 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over *Srisawat et al.* in view of *Rigaut et al.* Applicants respectfully submit that *Rigaut et al.* also do not teach or suggest that the insulator sequence comprises stretches of identical nucleotides flanked by identical restriction sites. Therefore, the teaching of *Rigaut et al.* does not cure the above-mentioned deficiencies of *Srisawat et al.* Applicants, therefore, respectfully submit that claim 10, as currently amended, and claims 11–12, 15–17 and 20–22, which depend from claim 10, are non-obvious over the combined teachings of *Srisawat et al.* and *Rigaut et al.*

*Srisawat et al. and Johansson et al.*

Claims 10, 12–13, 15–17 and 20–22 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over *Srisawat et al.* in view of *Johansson et al.* Applicants respectfully submit that *Johansson et al.* also do not teach or suggest that the insulator sequence comprises stretches of identical nucleotides flanked by identical restriction sites. Therefore, the teaching of *Johansson et al.* does not cure the above-mentioned deficiencies of *Srisawat et al.* It is respectfully submitted that claim 10, as currently amended, and claims 12–13, 15–17 and 20–22, which depend from claim 10, are non-obvious over *Srisawat et al.* in view of *Johansson et al.*

*Srisawat et al., Bachler et al., Bardwell et al. and Boniface et al.*

Claims 10–13, 15–17 and 20–22 are newly rejected under 35 U.S.C. § 103(a) as being unpatentable over *Srisawat et al.* in view of the combined teachings of Bachler et al. (*Methods*, 2002, 26:15–161), Bardwell et al. (*Nucleic Acids Research*, 1990, 18:6587–6594) and Boniface et al. (U.S. Patent App. Pub. 2005/0118646). Neither *Bachler et al.*, *Bardwell et al.* nor *Boniface*

*et al* teach or suggest that the at least one insulator sequence comprises stretches of identical nucleotides flanked by identical restriction sites. These references, therefore, also fail to cure the above-mentioned deficiencies of *Srisawi et al* with respect to claims 10–13, 15–17 and 20–22.

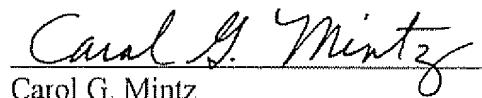
### Conclusion

Applicants respectfully request entry of the foregoing amendment, withdrawal of the rejections and allowance of the pending claims. If the Examiner feels that a telephone conference might expedite the resolution of any issue that may remain in this case, the Examiner is invited to contact the undersigned.

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the prior art that have yet to be raised, but which may be raised in the future.

It is believed that no extensions of time or fees are required beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that an extension of time is necessary to allow consideration of this paper, such extension is hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Deposit Account No. 03-2769 (ref. 1889-00900) of Conley Rose, P.C., Houston, Texas.

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